

Case No. : <u>GTS20230629015-1-10</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.7.14</u> Test Engineer: <u>Evan Ouyang</u>

Appendix A.1: 20dB Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant0	2402	0.921	2401.559	2402.480	---	---
		2441	0.930	2440.550	2441.480	---	---
		2480	0.930	2479.553	2480.483	---	---
2DH1	Ant0	2402	1.230	2401.382	2402.612	---	---
		2441	1.233	2440.397	2441.630	---	---
		2480	1.257	2479.379	2480.636	---	---
3DH1	Ant0	2402	1.218	2401.415	2402.633	---	---
		2441	1.209	2440.421	2441.630	---	---
		2480	1.221	2479.406	2480.627	---	---

Test Graphs



DH1_Ant0_2402



DH1_Ant0_2441



DH1_Ant0_2480



2DH1_Ant0_2402



2DH1_Ant1_2441



2DH1_Ant0_2480



3DH1_Ant0_2402



3DH1_Ant0_2441



3DH1_Ant0_2480

Appendix A.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant0	2402	0.85253	2401.584	2402.436	---	---
		2441	0.86190	2440.579	2441.441	---	---
		2480	0.85594	2479.582	2480.438	---	---
2DH1	Ant0	2402	1.1523	2401.427	2402.579	---	---
		2441	1.1519	2440.429	2441.581	---	---
		2480	1.1513	2479.428	2480.579	---	---
3DH1	Ant0	2402	1.1382	2401.453	2402.591	---	---
		2441	1.1428	2440.450	2441.593	---	---
		2480	1.1404	2479.451	2480.591	---	---

Test Graphs



DH1_Ant0_2402



DH1_Ant0_2441



DH1_Ant0_2480



2DH1_Ant0_2402



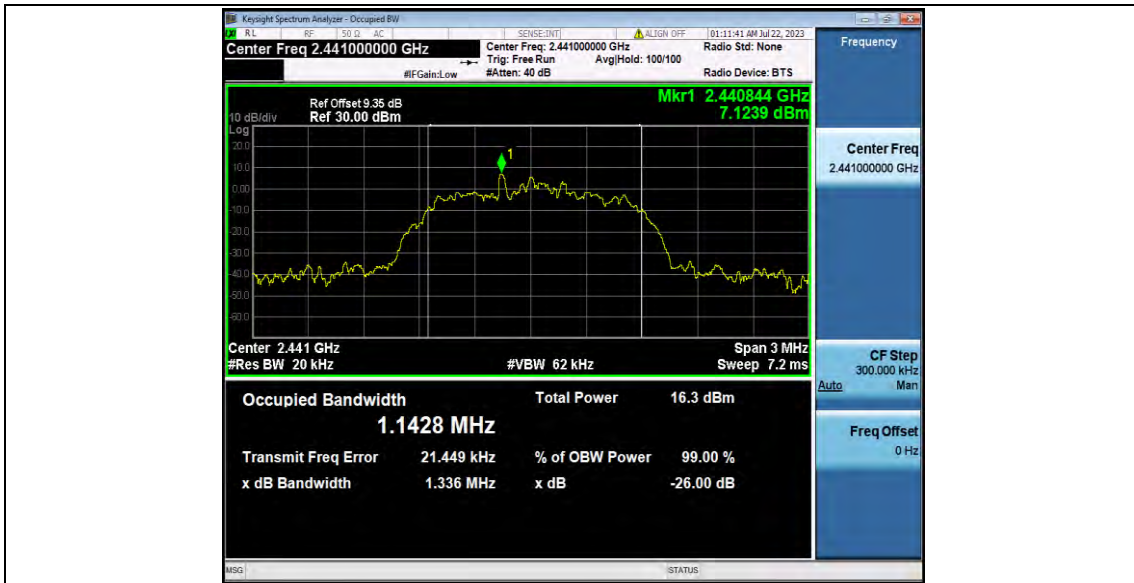
2DH1_Ant0_2441



2DH1_Ant0_2480



3DH1_Ant0_2402



3DH1_Ant0_2441



3DH1_Ant0_2480

Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant0	2402	7.96	≤20.97	PASS
		2441	9.6	≤20.97	PASS
		2480	9.35	≤20.97	PASS
2DH1	Ant0	2402	10.07	≤20.97	PASS
		2441	11.17	≤20.97	PASS
		2480	10.88	≤20.97	PASS
3DH1	Ant0	2402	10.57	≤20.97	PASS
		2441	12.2	≤20.97	PASS
		2480	11.93	≤20.97	PASS

Appendix A.4: Carrier frequency separation

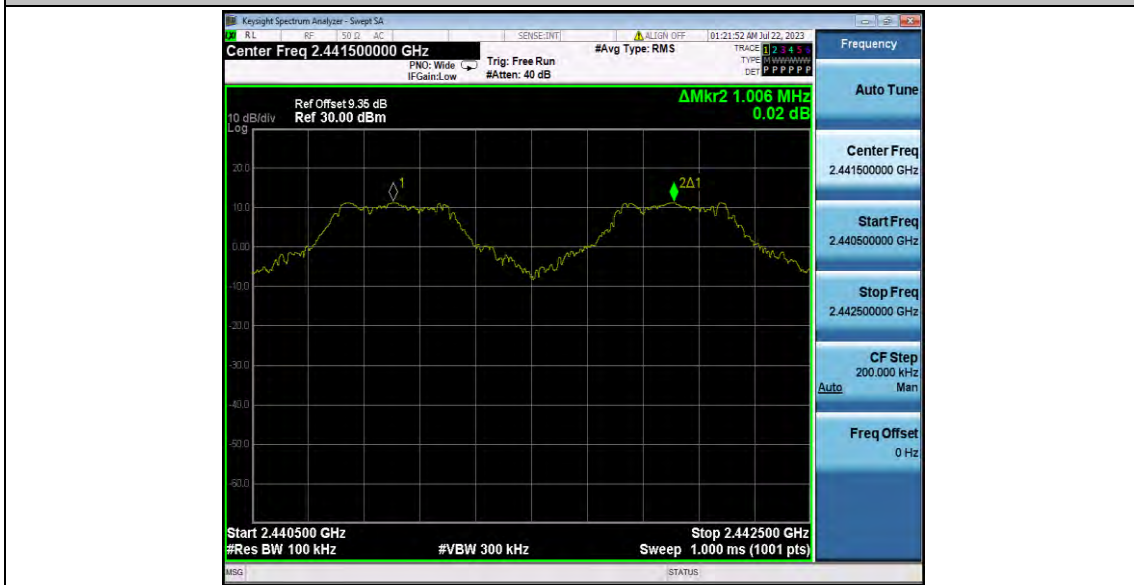
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant0	Hop_2402	1.01	≥ 0.620	PASS
		Hop_2441	1.006	≥ 0.620	PASS
		Hop_2480	0.826	≥ 0.620	PASS
2DH1	Ant0	Hop_2402	0.992	≥ 0.838	PASS
		Hop_2441	0.988	≥ 0.838	PASS
		Hop_2480	1.004	≥ 0.838	PASS
3DH1	Ant0	Hop_2402	0.974	≥ 0.814	PASS
		Hop_2441	0.842	≥ 0.814	PASS
		Hop_2480	1.198	≥ 0.814	PASS

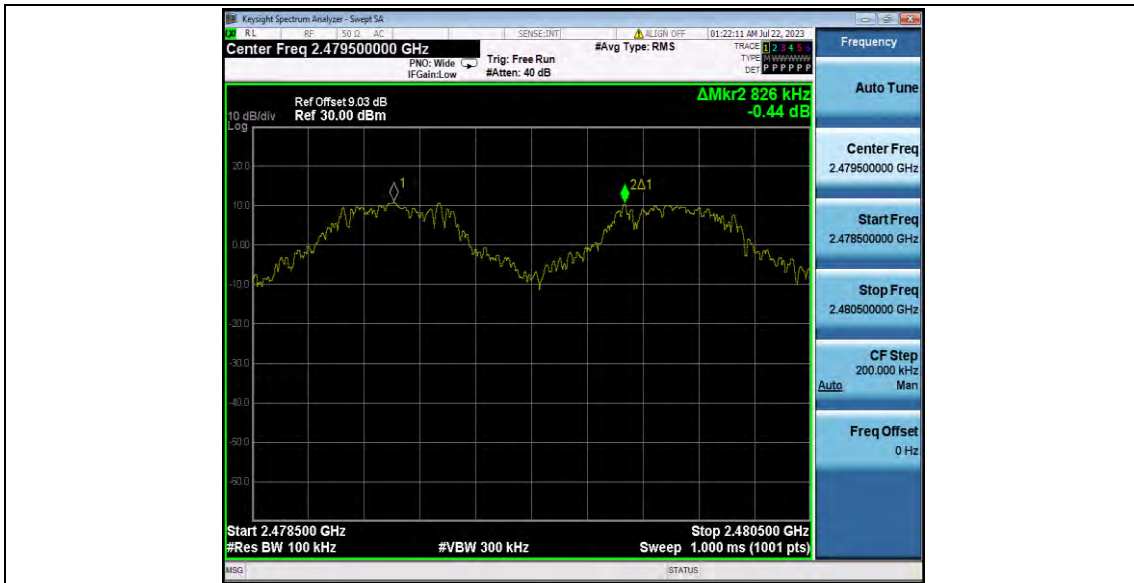
Test Graphs



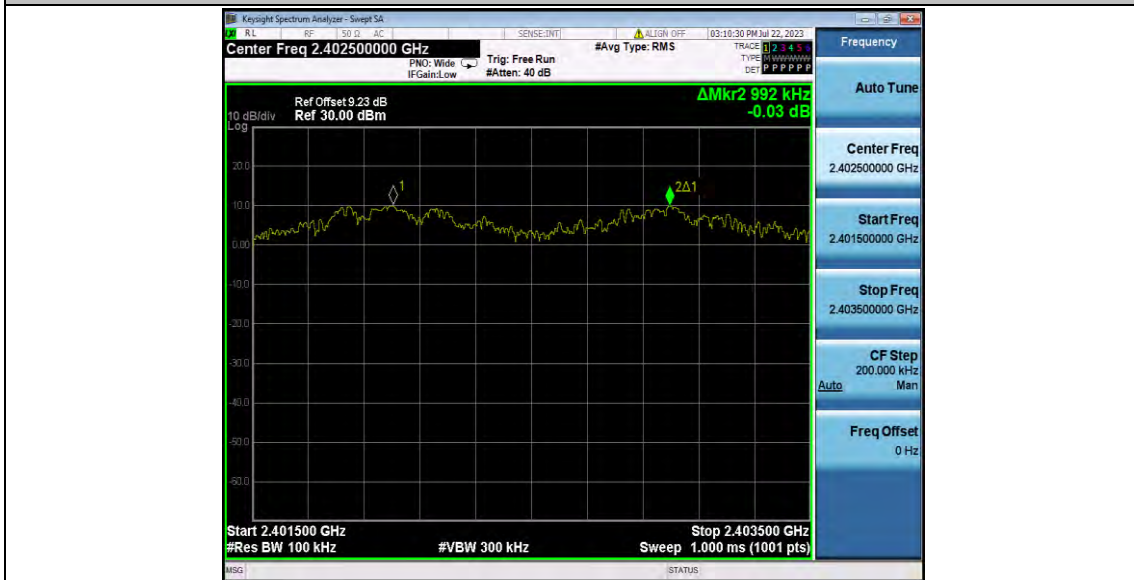
DH1_Ant0_Hop_2402



DH1_Ant0_Hop_2441



DH1_Ant0_Hop_2480



2DH1_Ant0_Hop_2402



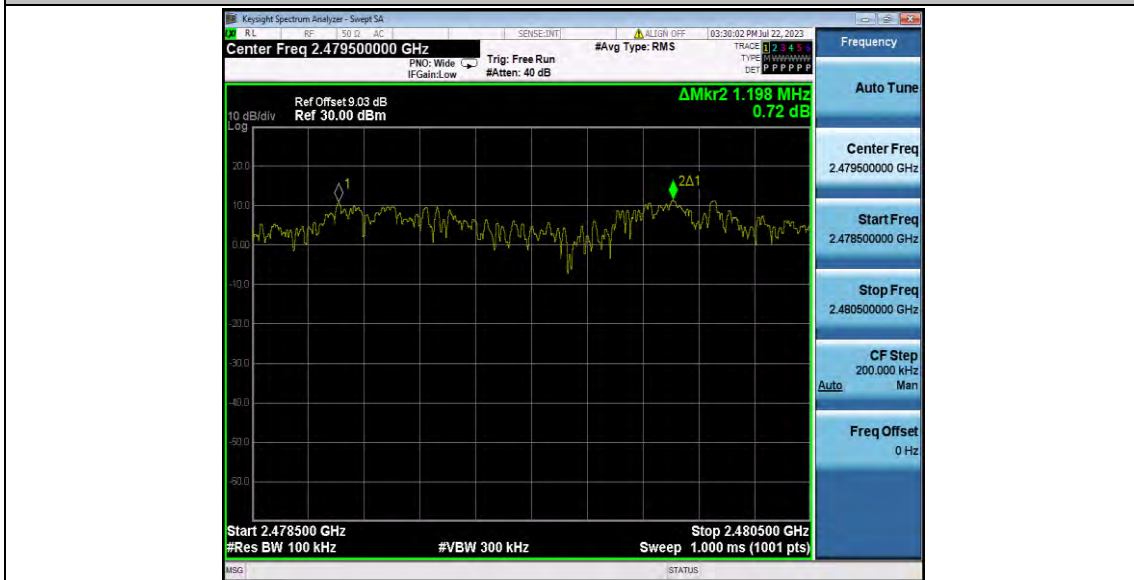
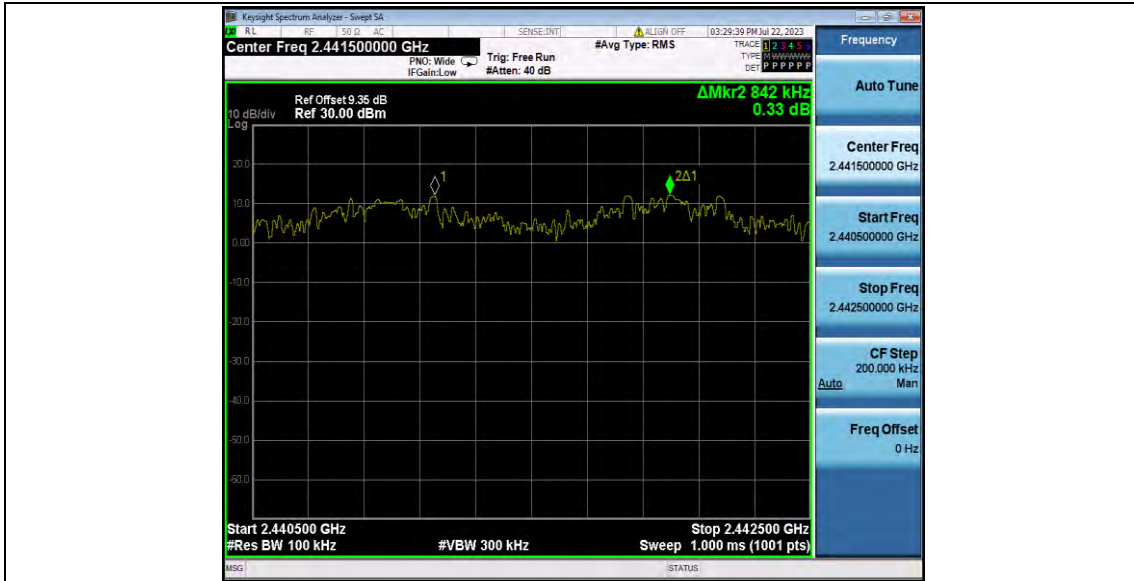
2DH1_Ant1_Hop_2441



2DH1_Ant0_Hop_2480



3DH1_Ant0_Hop_2402

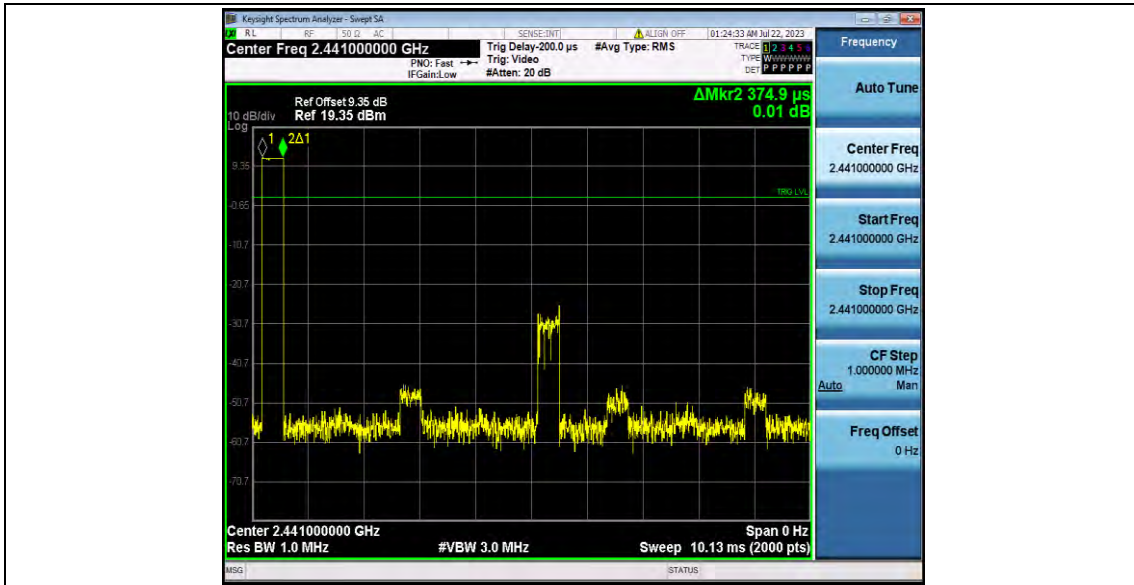


Appendix A.5: Time of occupancy

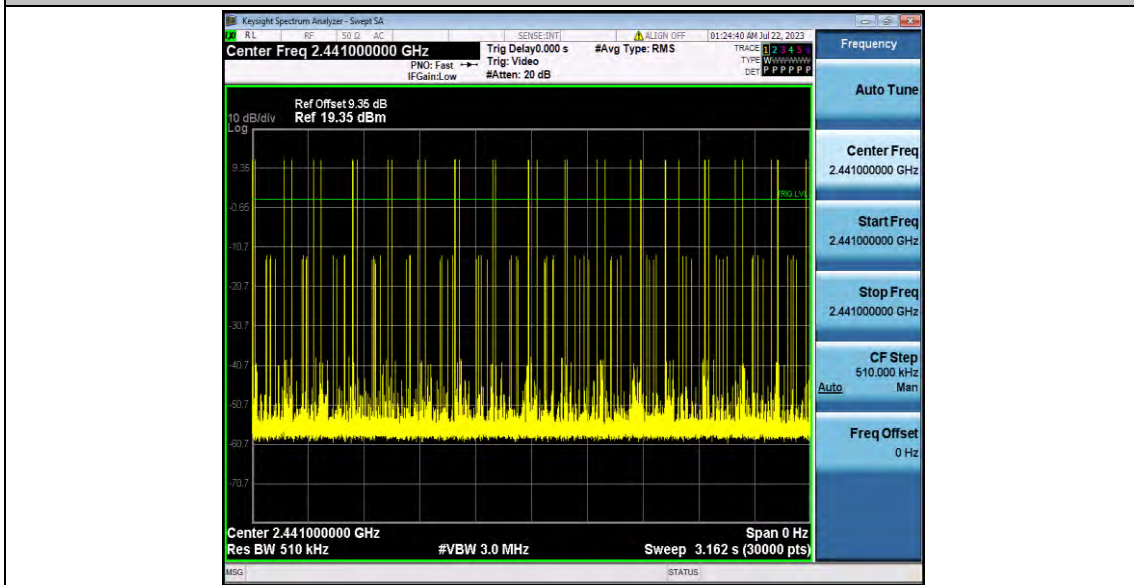
Test Result

Test Mode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant0	Hop	0.37	330	0.124	≤0.4	PASS
DH3	Ant0	Hop	1.63	170	0.277	≤0.4	PASS
DH5	Ant0	Hop	2.88	100	0.288	≤0.4	PASS
2DH1	Ant0	Hop	0.39	330	0.127	≤0.4	PASS
2DH3	Ant0	Hop	1.64	140	0.229	≤0.4	PASS
2DH5	Ant0	Hop	2.88	100	0.288	≤0.4	PASS
3DH1	Ant0	Hop	0.38	330	0.125	≤0.4	PASS
3DH3	Ant0	Hop	1.63	130	0.212	≤0.4	PASS
3DH5	Ant0	Hop	2.89	80	0.231	≤0.4	PASS

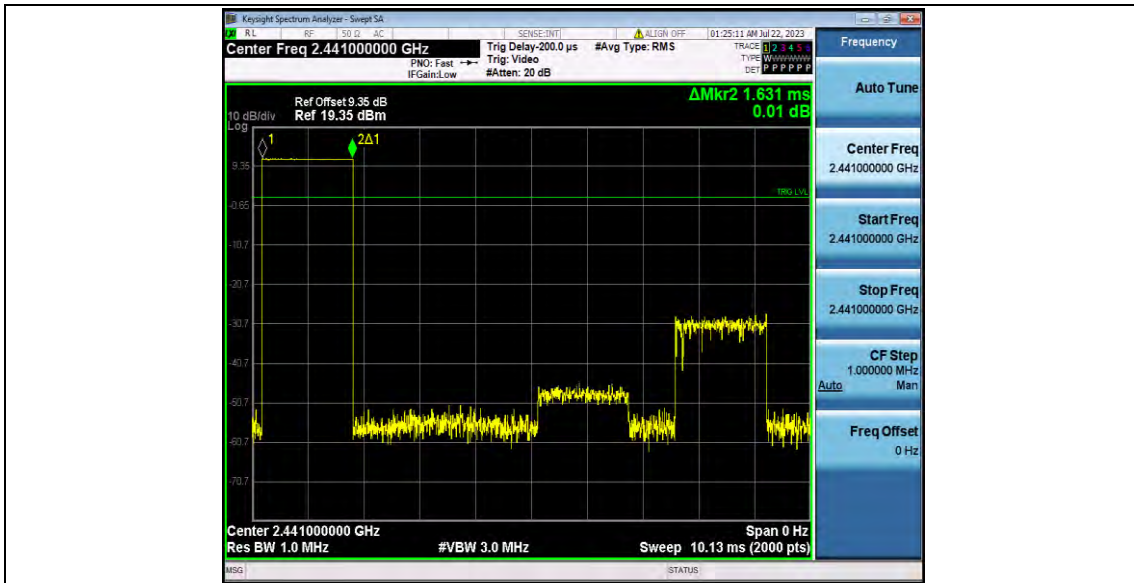
Test Graphs



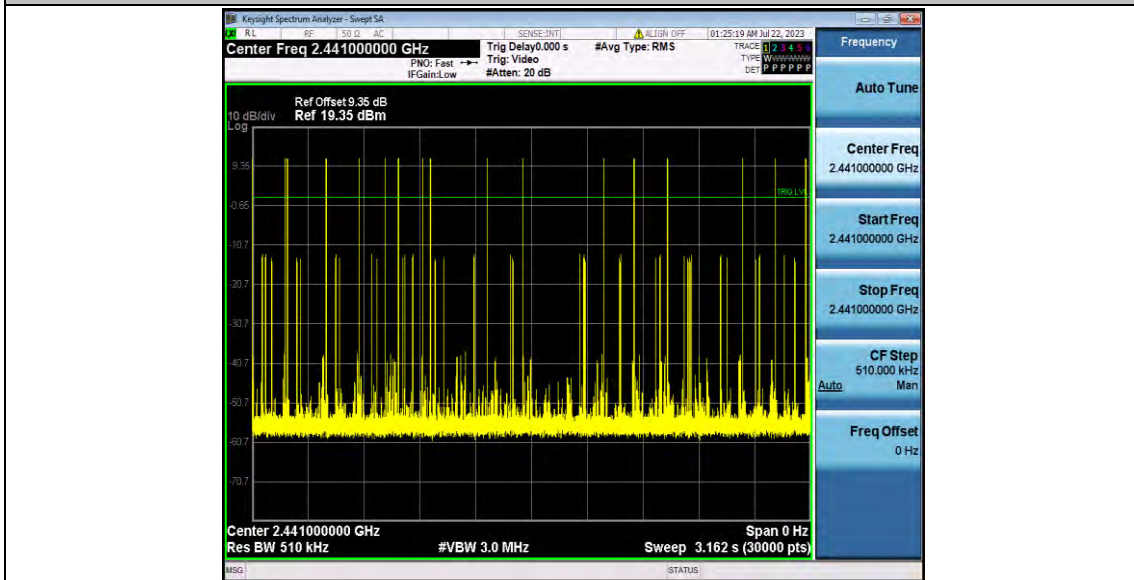
DH1_Ant0_Hop



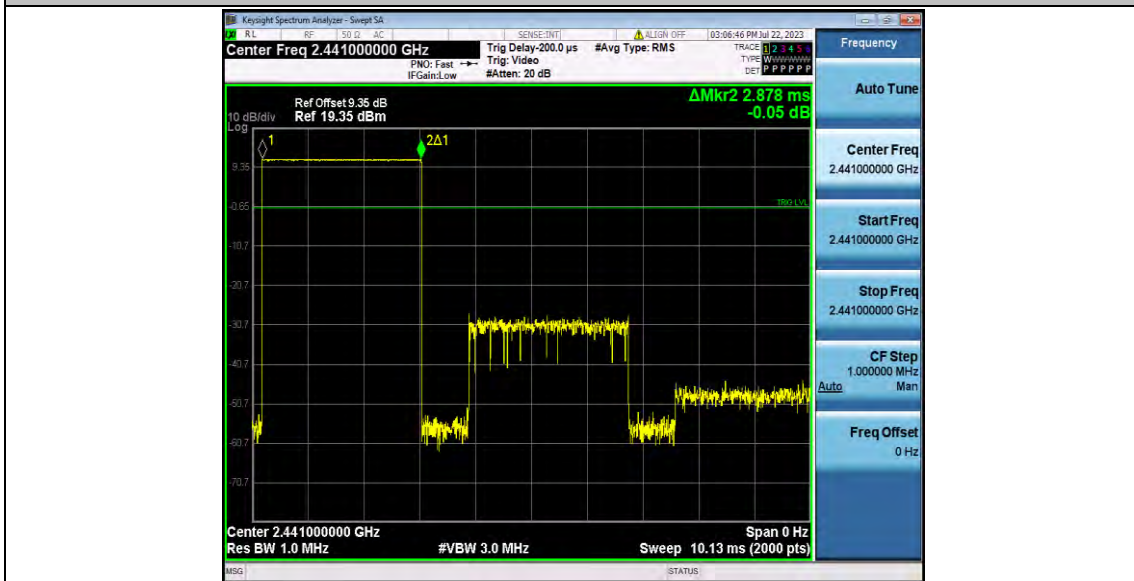
DH1_Ant0_Hop



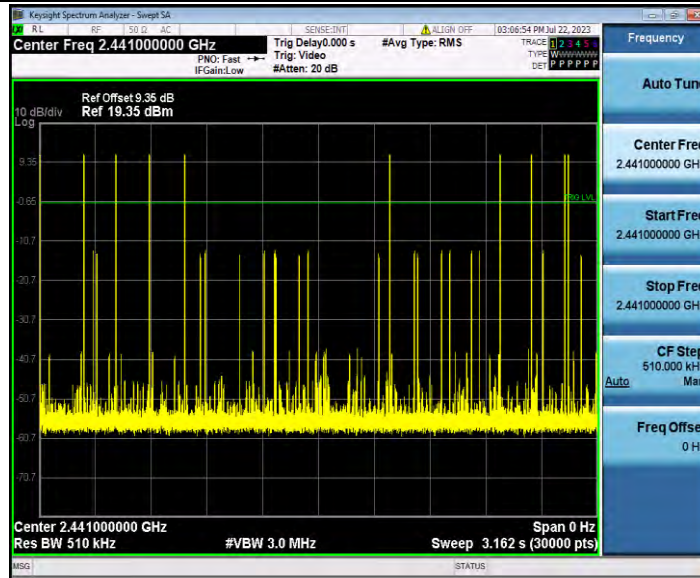
DH3_Ant0_Hop



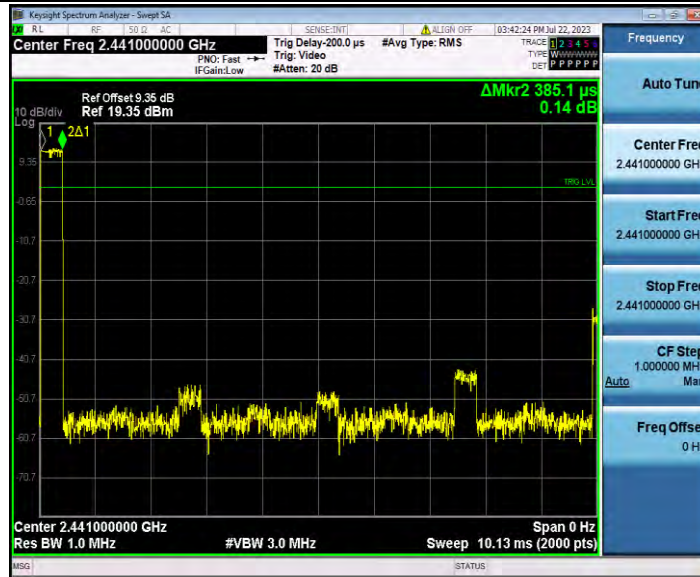
DH3_Ant0_Hop



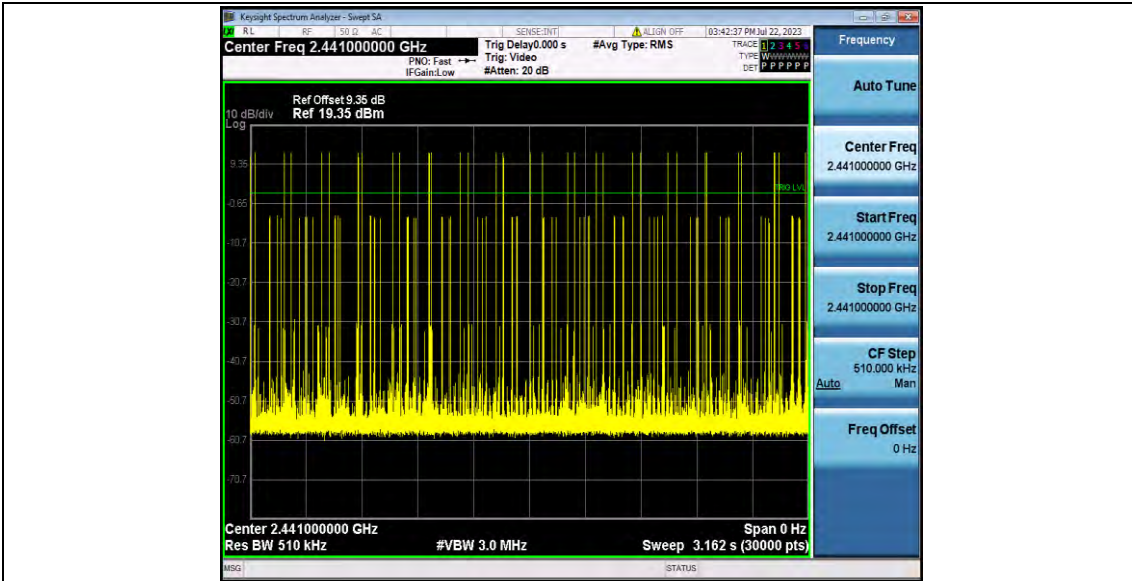
DH5_Ant0_Hop



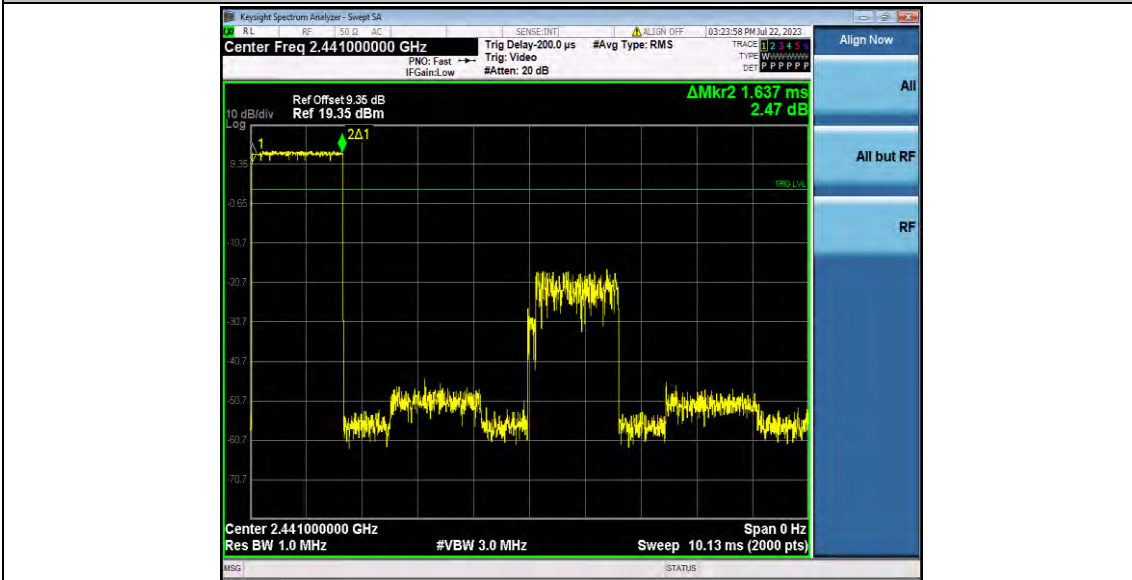
DH5_Ant0_Hop



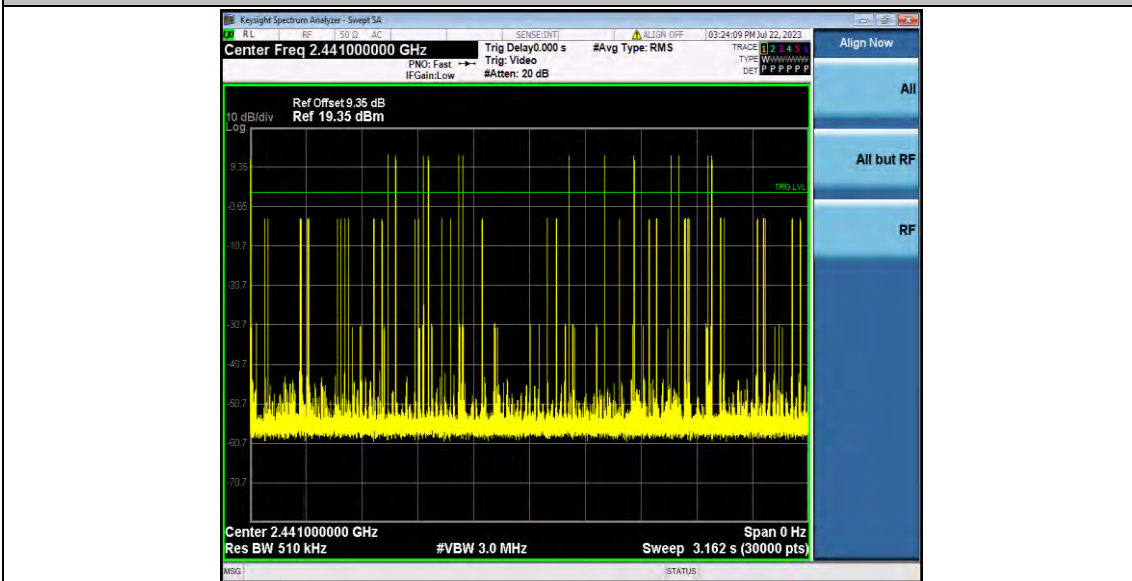
2DH1_Ant0_Hop



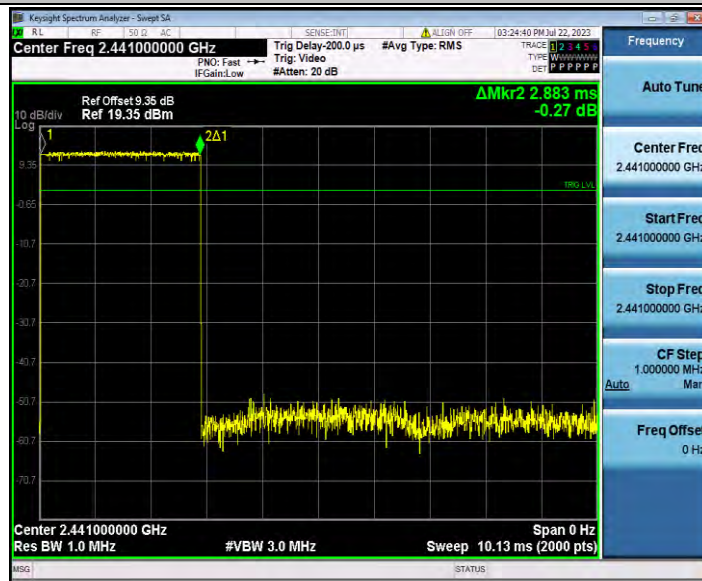
2DH1_Ant0_Hop



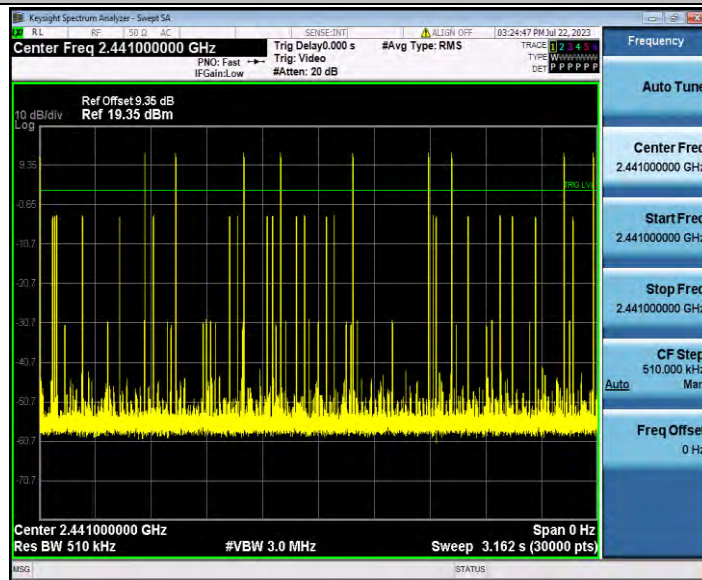
2DH3_Ant0_Hop



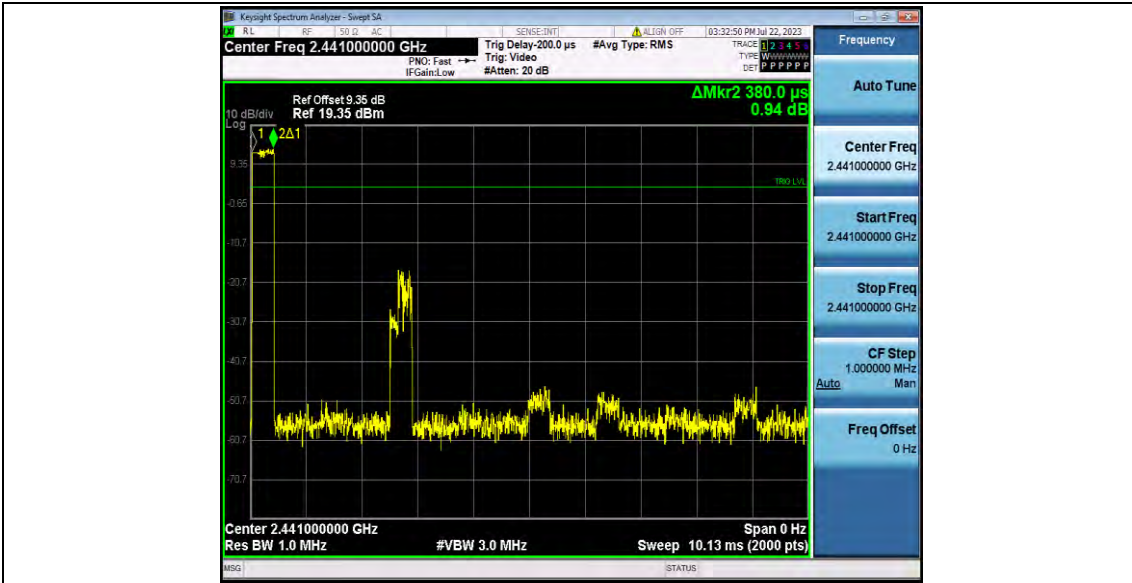
2DH3_Ant0_Hop



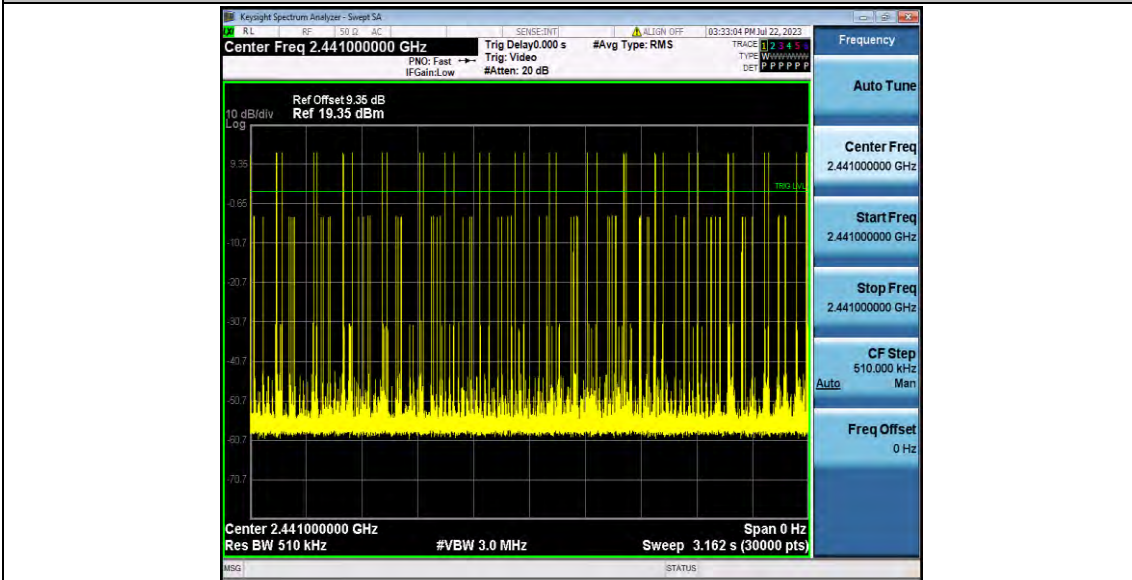
2DH5_Ant0_Hop



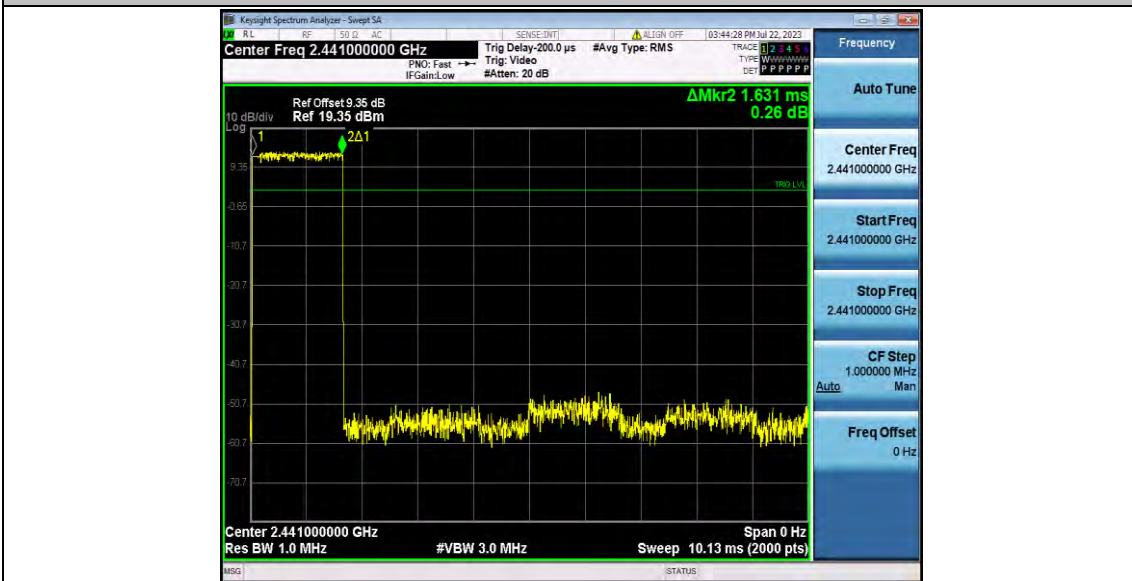
2DH5_Ant0_Hop



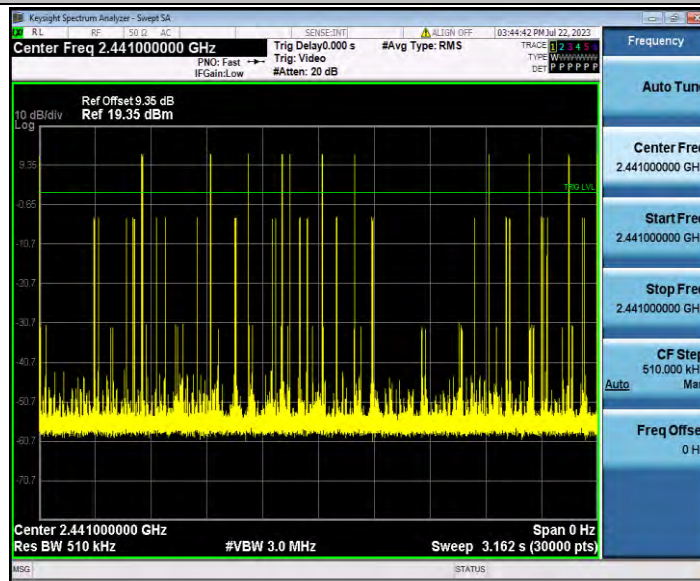
3DH1_Ant0_Hop



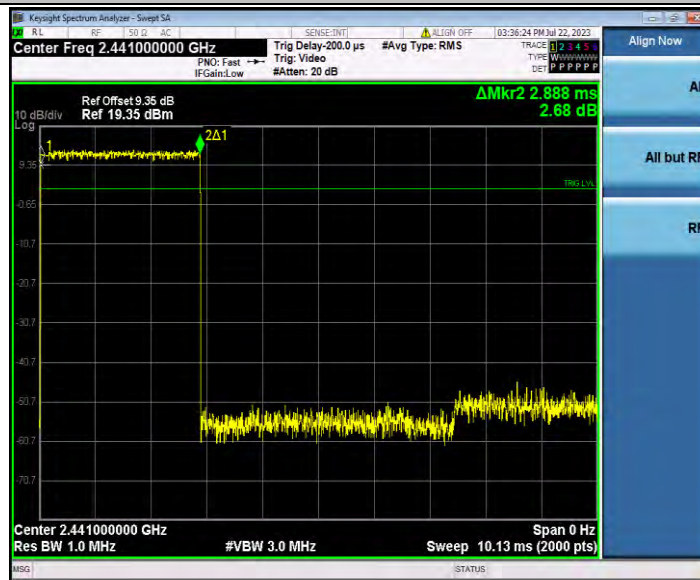
3DH1_Ant0_Hop



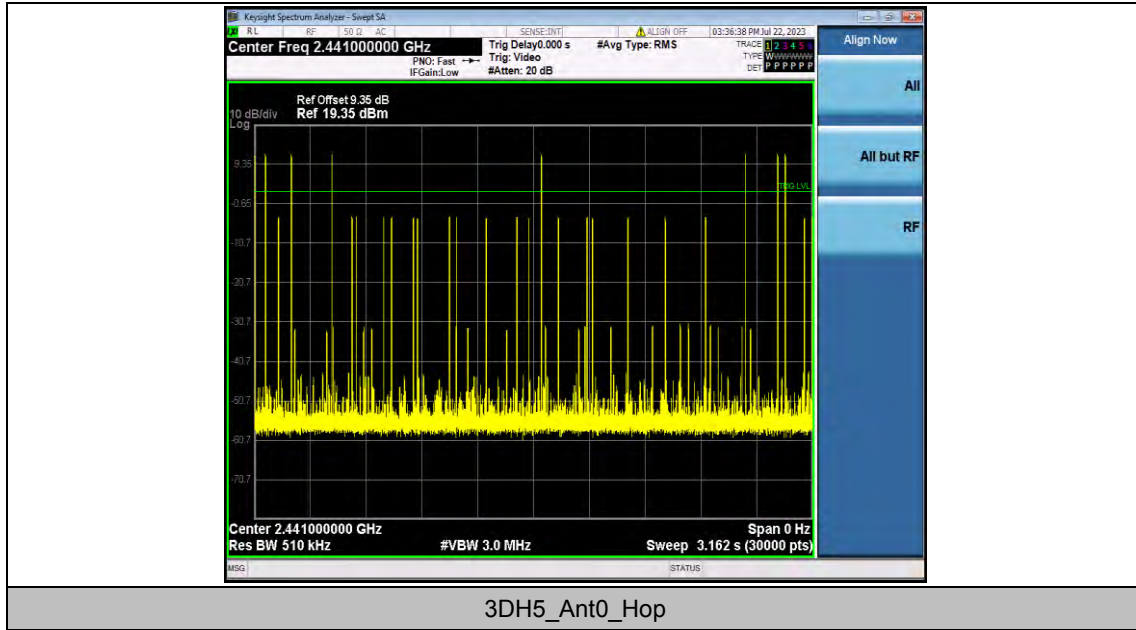
3DH3_Ant0_Hop



3DH3_Ant0_Hop



3DH5_Ant0_Hop



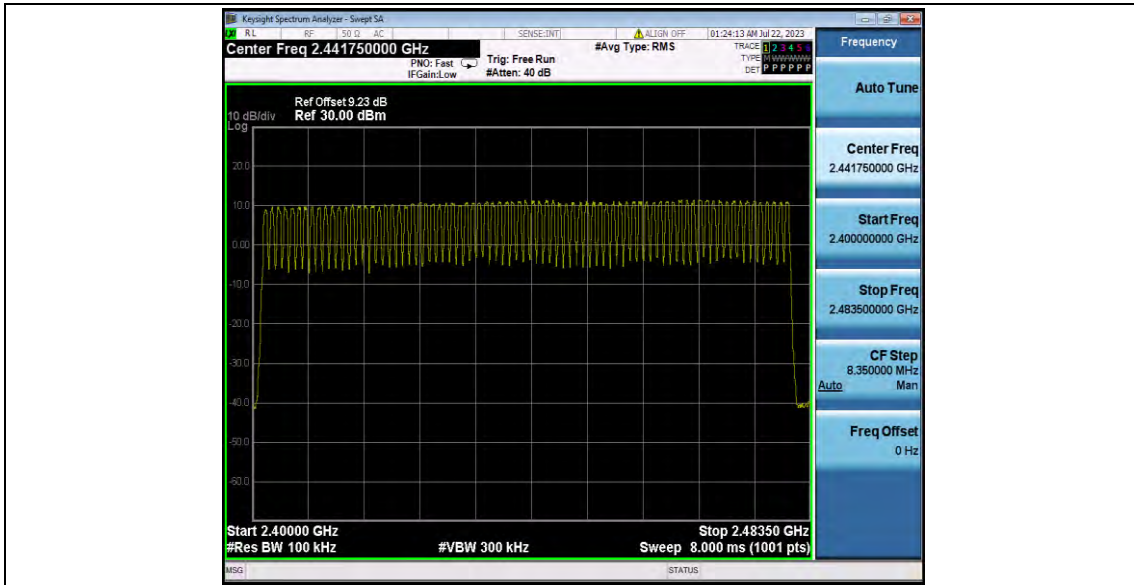
3DH5_Ant0_Hop

Appendix A.6: Number of hopping channels

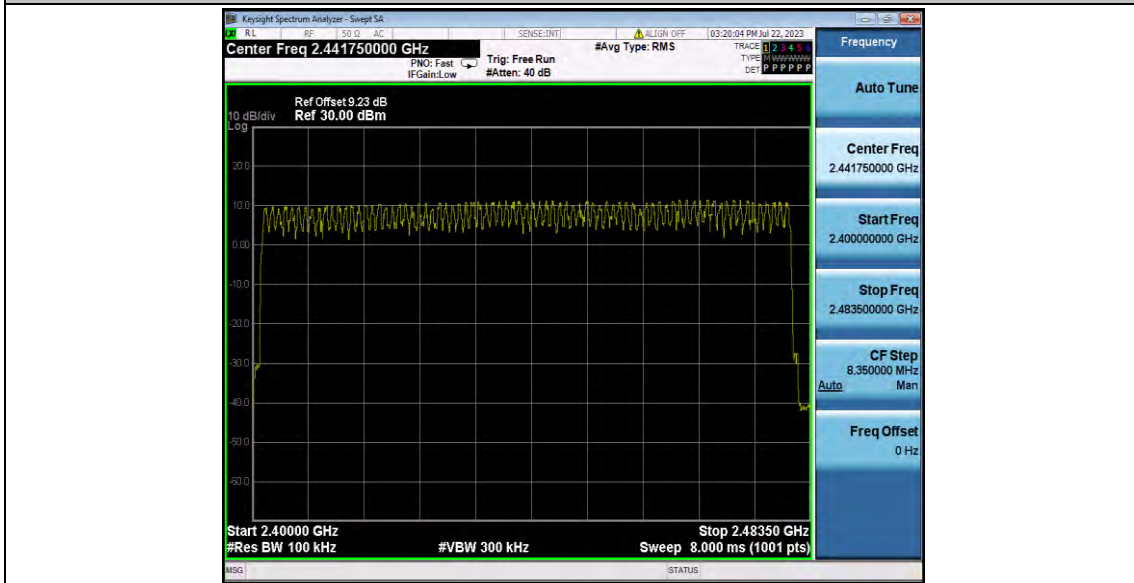
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant0	Hop	79	≥15	PASS
2DH1	Ant0	Hop	79	≥15	PASS
3DH1	Ant0	Hop	79	≥15	PASS

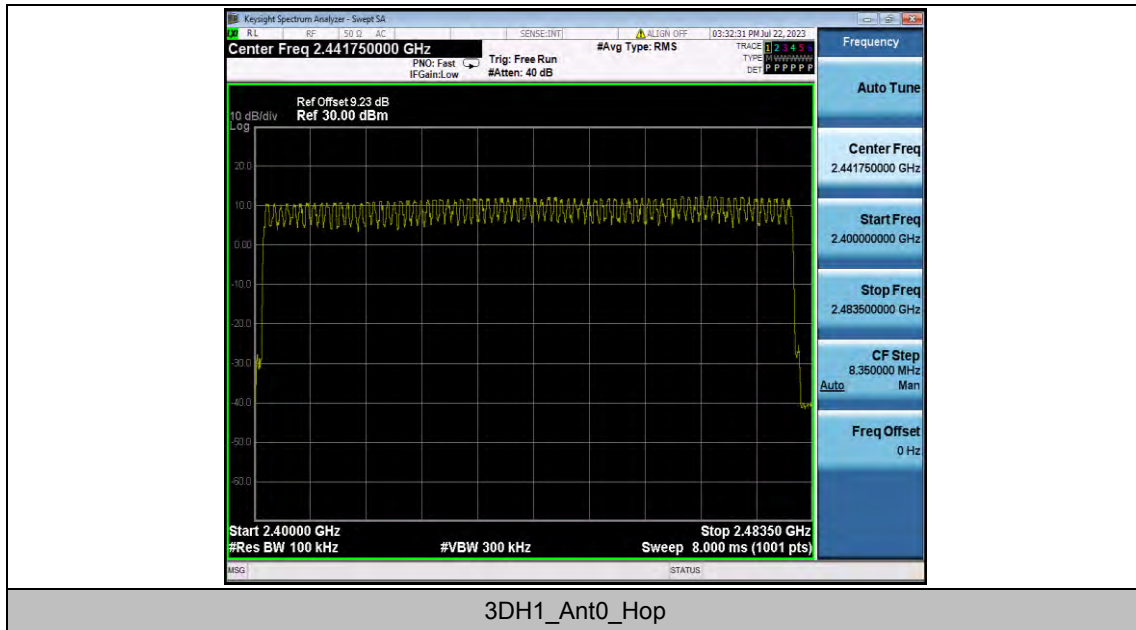
Test Graphs



DH1_Ant0_Hop



2DH1_Ant0_Hop

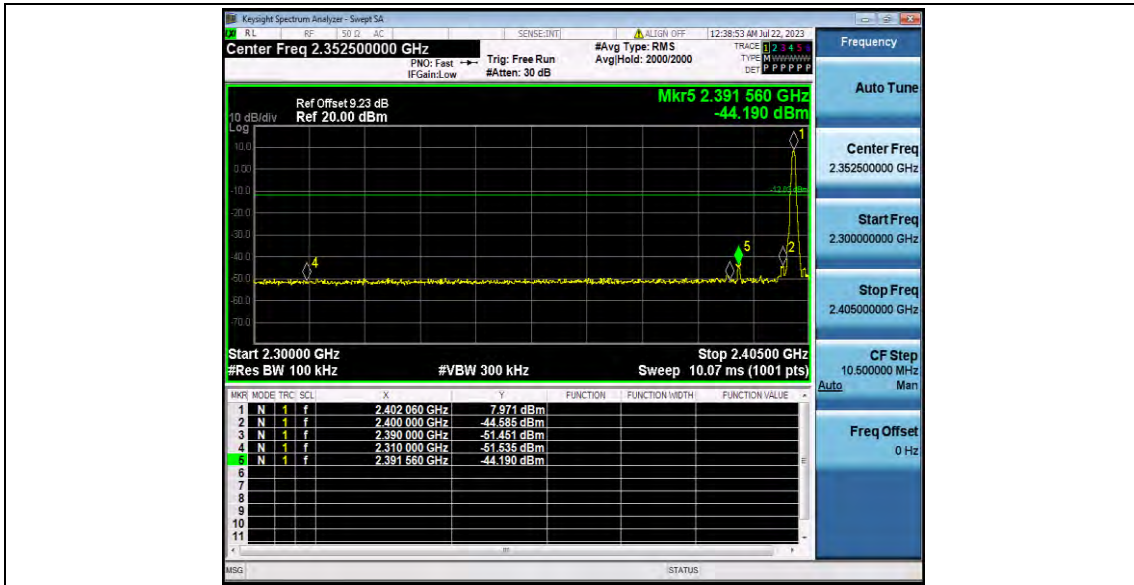


Appendix A.7: Band edge measurements

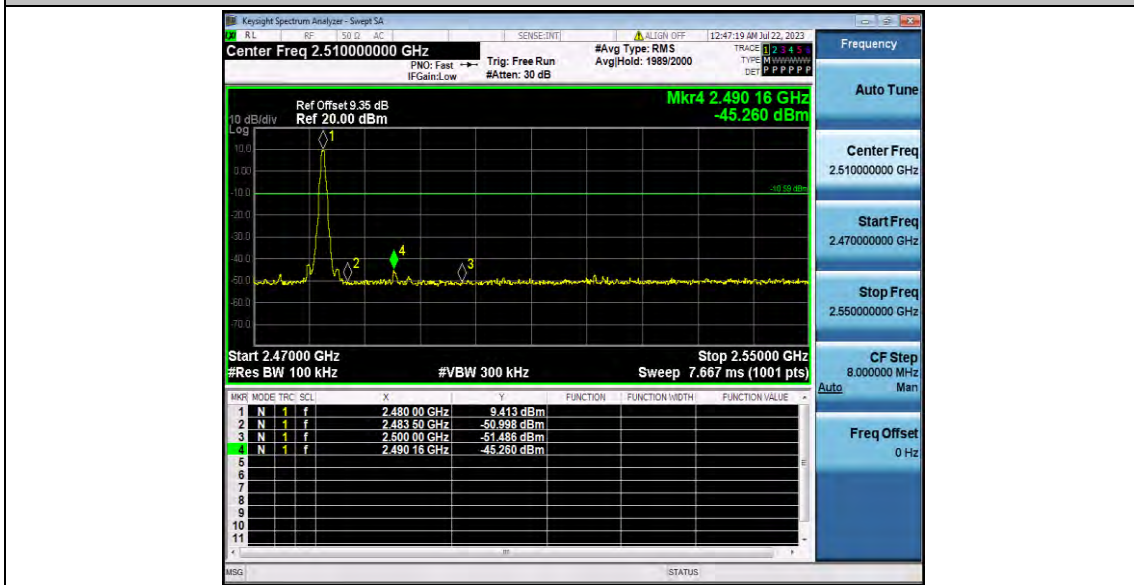
Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant0	Low	2402	7.97	-44.19	≤ -12.03	PASS
		High	2480	9.41	-45.26	≤ -10.59	PASS
		Low	Hop_2402	9.49	-49.58	≤ -10.51	PASS
		High	Hop_2480	11.09	-49.2	≤ -8.91	PASS
2DH1	Ant0	Low	2402	8.88	-44.56	≤ -11.12	PASS
		High	2480	9.80	-42.24	≤ -10.2	PASS
		Low	Hop_2402	9.47	-49.37	≤ -10.53	PASS
		High	Hop_2480	11.32	-48.92	≤ -8.68	PASS
3DH1	Ant0	Low	2402	8.82	-43.76	≤ -11.18	PASS
		High	2480	10.34	-45	≤ -9.66	PASS
		Low	Hop_2402	10.26	-49.51	≤ -9.74	PASS
		High	Hop_2480	11.85	-48.86	≤ -8.15	PASS

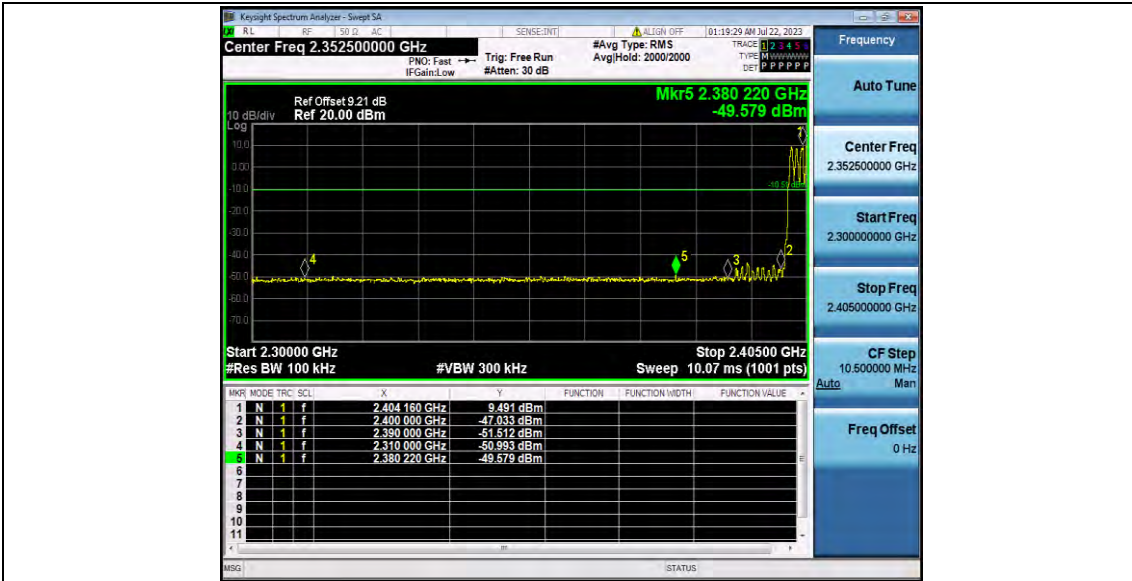
Test Graphs



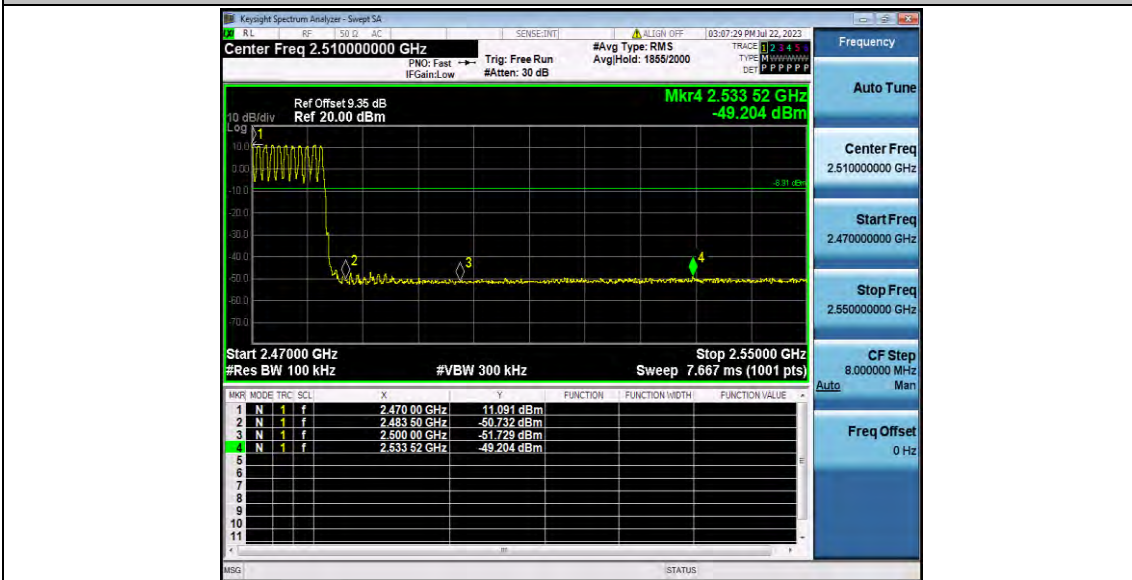
DH1_Ant0_Low_2402



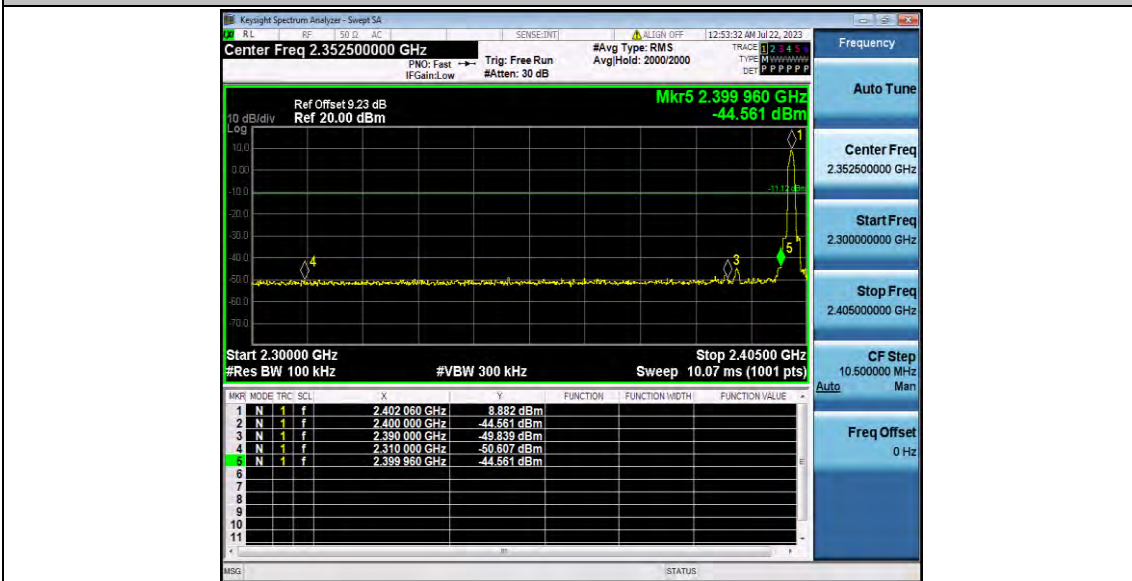
DH1_Ant0_High_2480



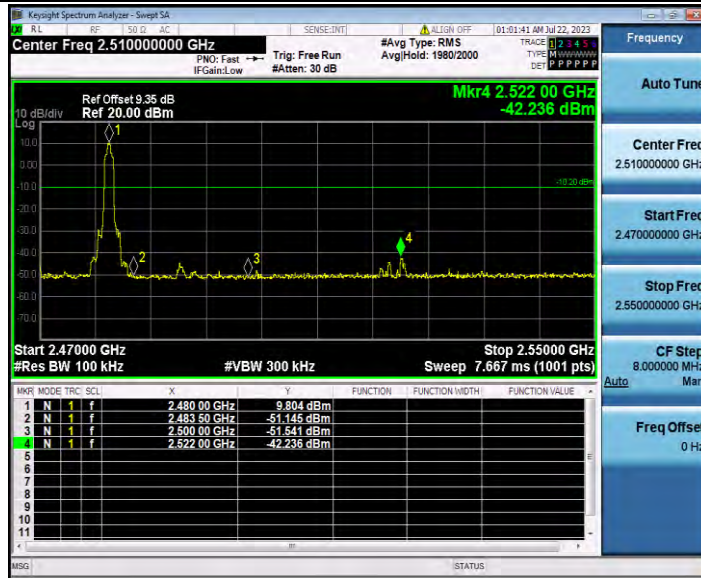
DH1_Ant0_Low_Hop_2402



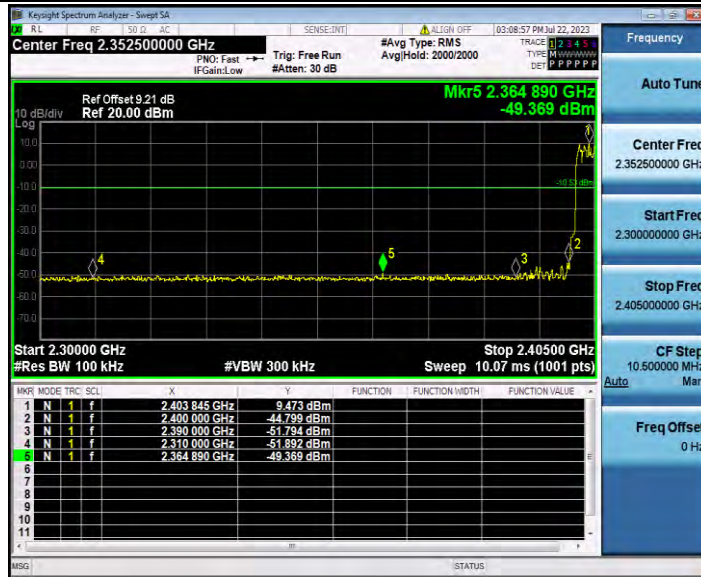
DH1_Ant0_High_Hop_2480



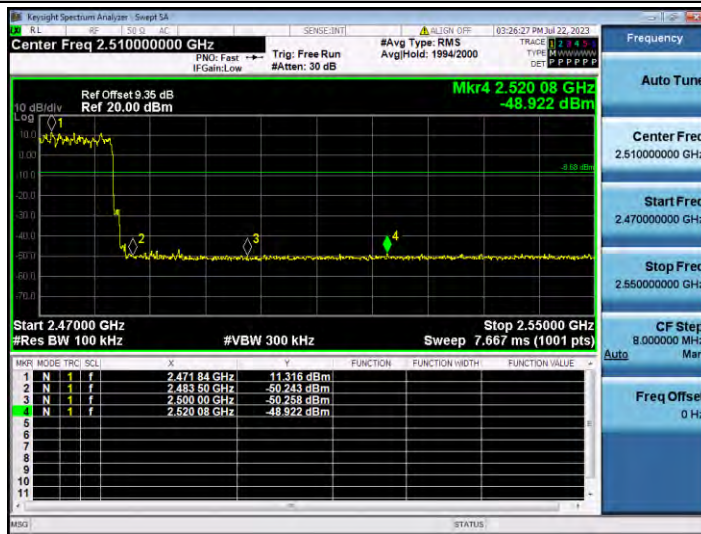
2DH1_Ant0_Low_2402



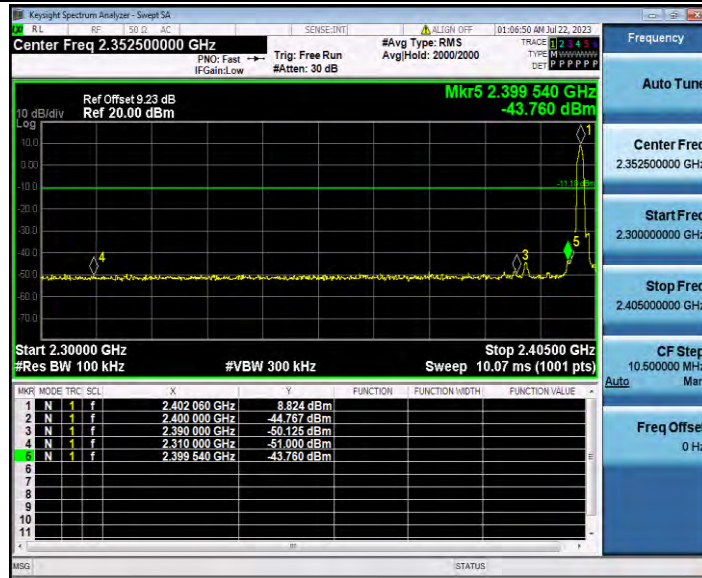
2DH1_Ant0_High_2480



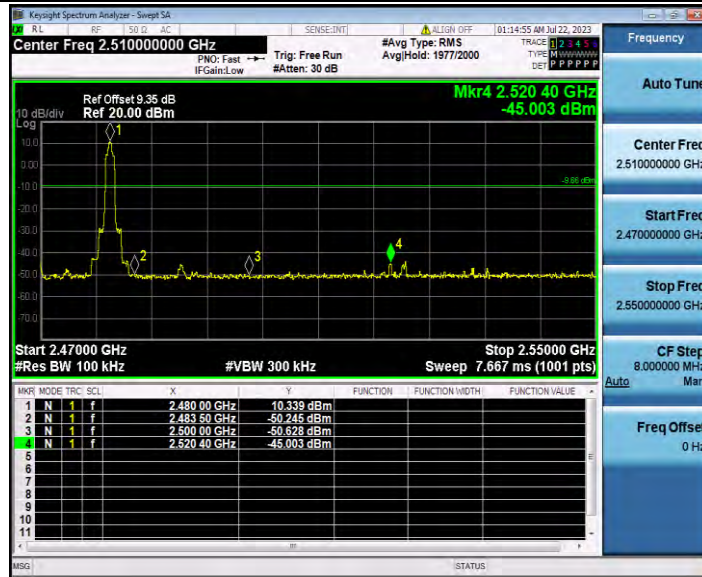
2DH1_Ant0_Low_Hop_2402



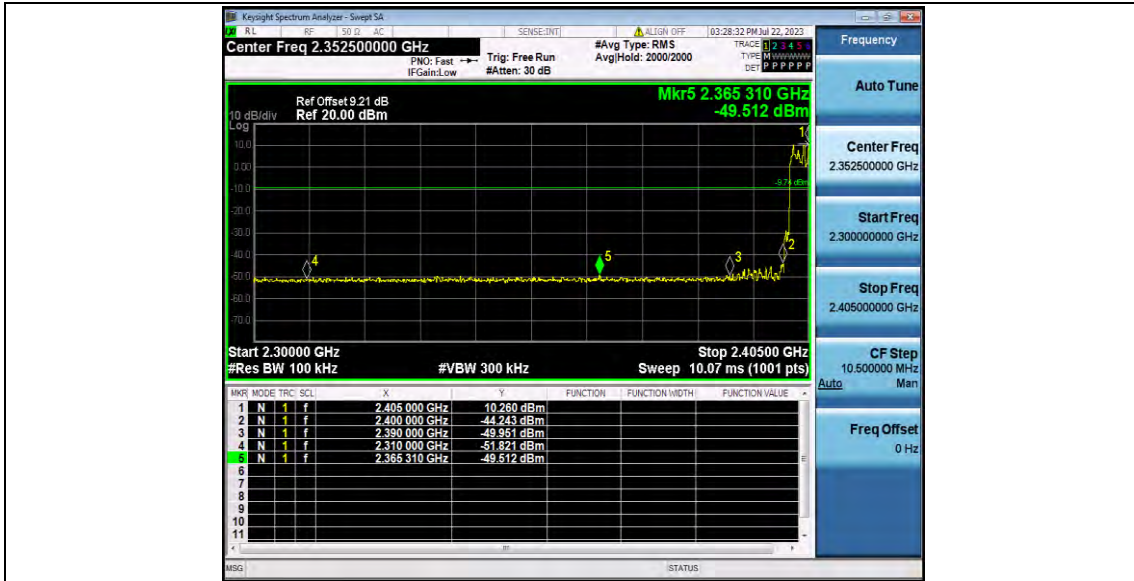
2DH1_Ant0_High_Hop_2480



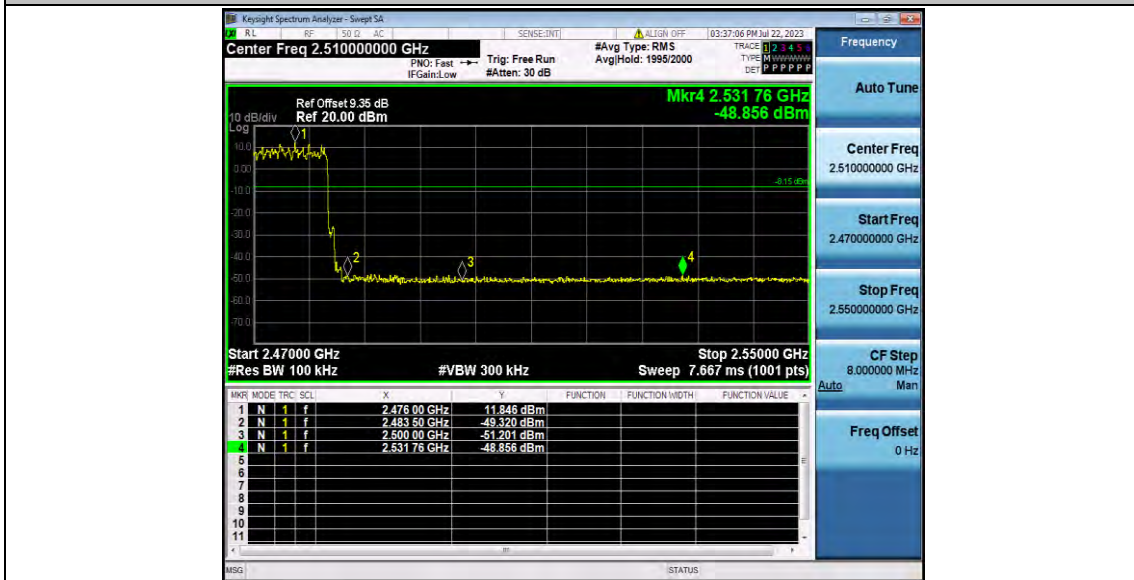
3DH1_Ant0_Low_2402



3DH1_Ant0_High_2480



3DH1_Ant0_Low_Hop_2402



3DH1_Ant0_High_Hop_2480

Appendix A.8: Conducted Spurious Emission

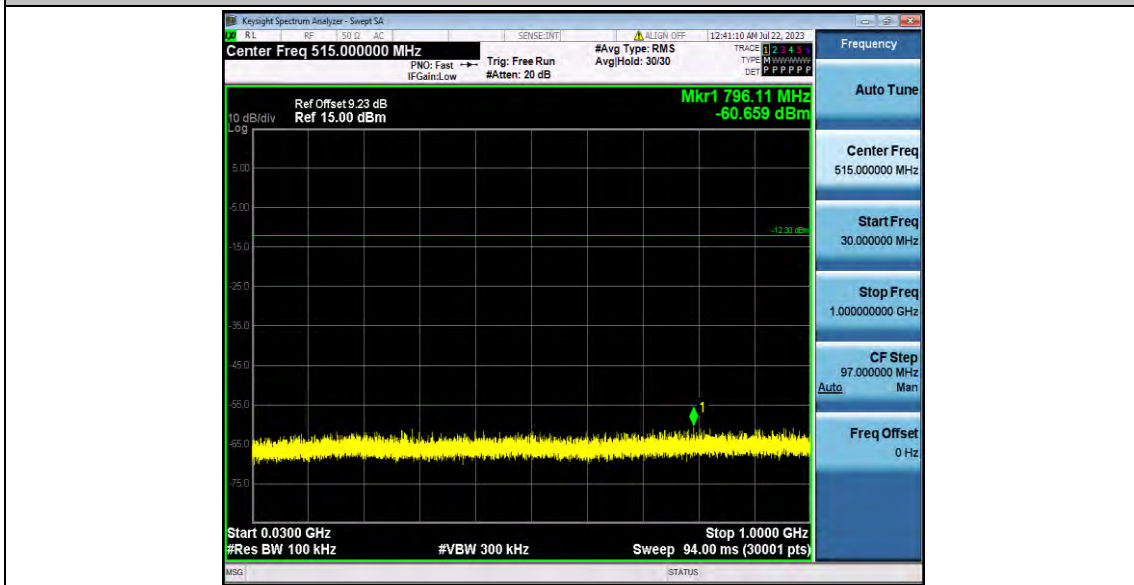
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant0	2402	Reference	7.70	7.70	---	PASS
			30~1000	7.70	-60.66	≤-12.3	PASS
			1000~26500	7.70	-47.84	≤-12.3	PASS
		2441	Reference	8.64	8.64	---	PASS
			30~1000	8.64	-60.06	≤-11.36	PASS
			1000~26500	8.64	-46.67	≤-11.36	PASS
		2480	Reference	9.16	9.16	---	PASS
			30~1000	9.16	-60.51	≤-10.84	PASS
			1000~26500	9.16	-47.37	≤-10.84	PASS
2DH1	Ant0	2402	Reference	8.68	8.68	---	PASS
			30~1000	8.68	-60.16	≤-11.32	PASS
			1000~26500	8.68	-47.69	≤-11.32	PASS
		2441	Reference	9.59	9.59	---	PASS
			30~1000	9.59	-59.08	≤-10.41	PASS
			1000~26500	9.59	-47.05	≤-10.41	PASS
		2480	Reference	9.57	9.57	---	PASS
			30~1000	9.57	-48.32	≤-10.43	PASS
			1000~26500	9.57	-47.73	≤-10.43	PASS
3DH1	Ant0	2402	Reference	8.47	8.47	---	PASS
			30~1000	8.47	-60.36	≤-11.53	PASS
			1000~26500	8.47	-46.79	≤-11.53	PASS
		2441	Reference	9.77	9.77	---	PASS
			30~1000	9.77	-59.65	≤-10.23	PASS
			1000~26500	9.77	-45.27	≤-10.23	PASS
		2480	Reference	10.10	10.10	---	PASS
			30~1000	10.10	-60	≤-9.9	PASS
			1000~26500	10.10	-47.06	≤-9.9	PASS

Test Graphs



DH1_Ant0_2402_0~Reference



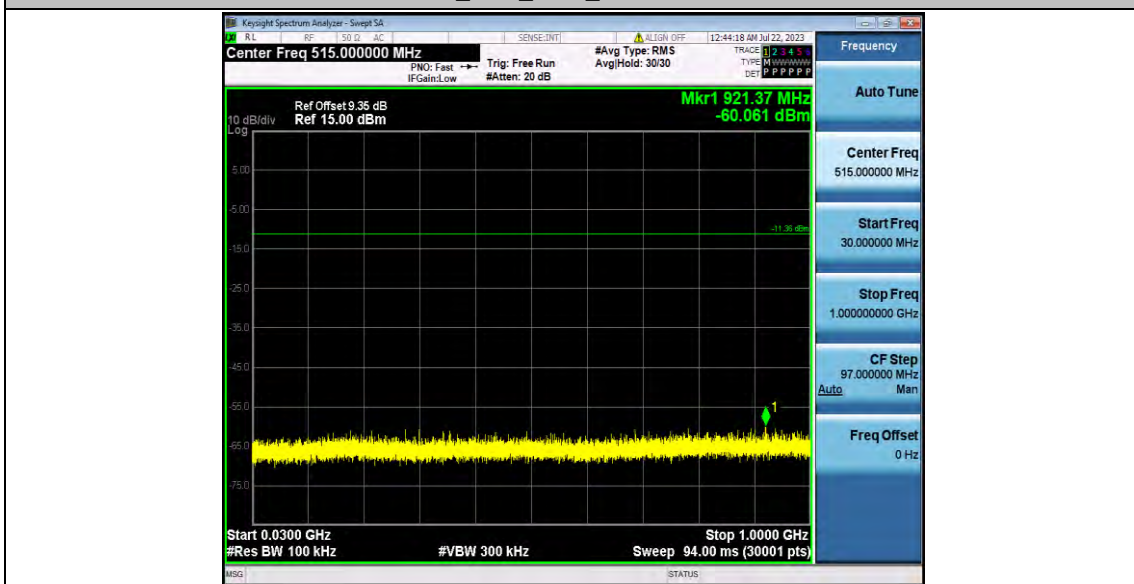
DH1_Ant0_2402_30~1000



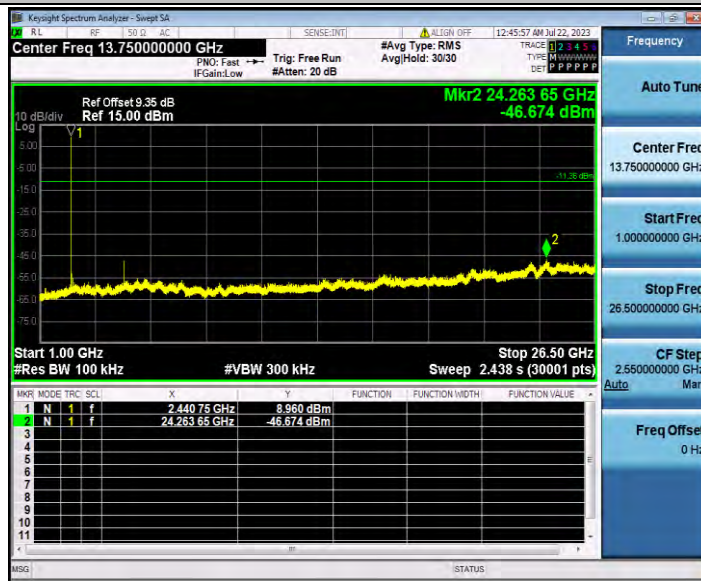
DH1_Ant0_2402_1000~26500



DH1_Ant0_2441_0~Reference



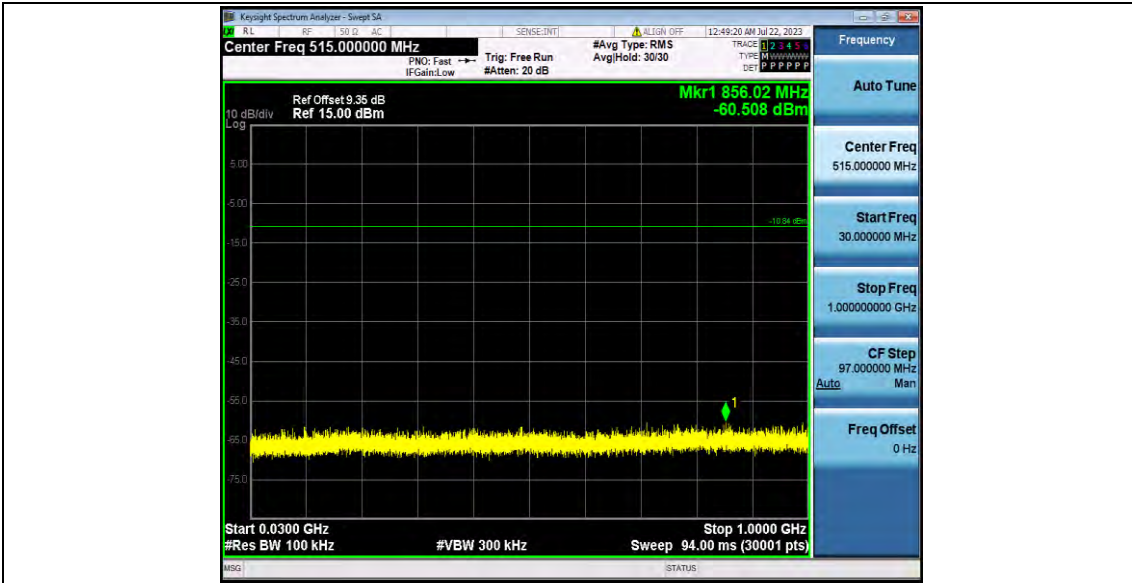
DH1_Ant0_2441_30~1000



DH1_Ant0_2441_1000~26500



DH1_Ant0_2480_0~Reference



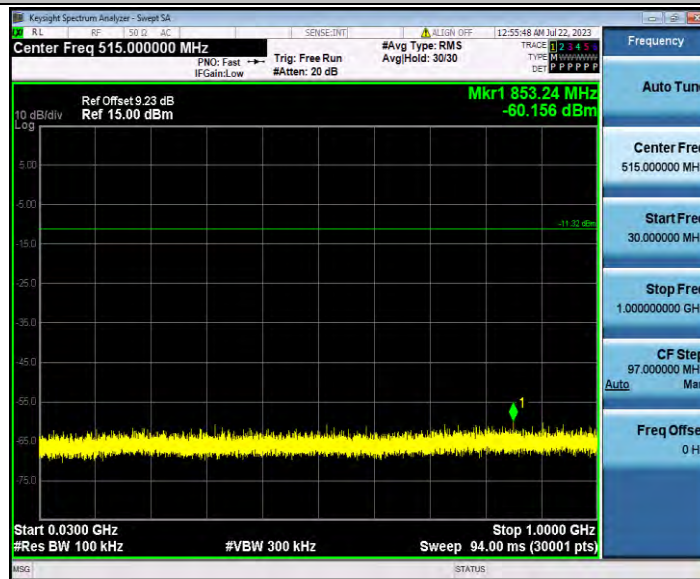
DH1_Ant0_2480_30~1000



DH1_Ant0_2480_1000~26500



2DH1_Ant0_2402_0~Reference



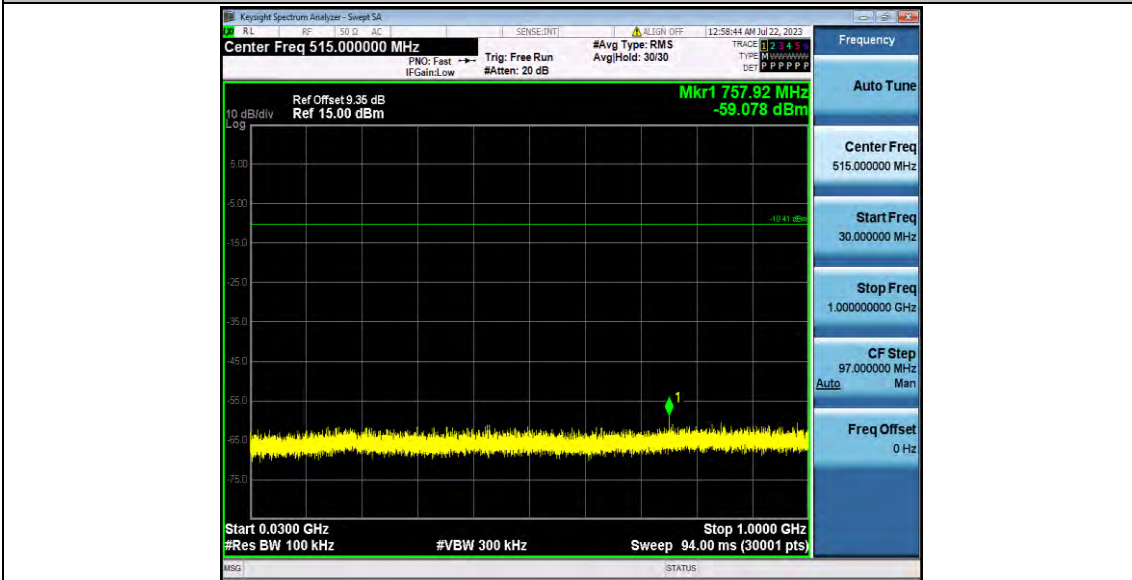
2DH1_Ant0_2402_30~1000



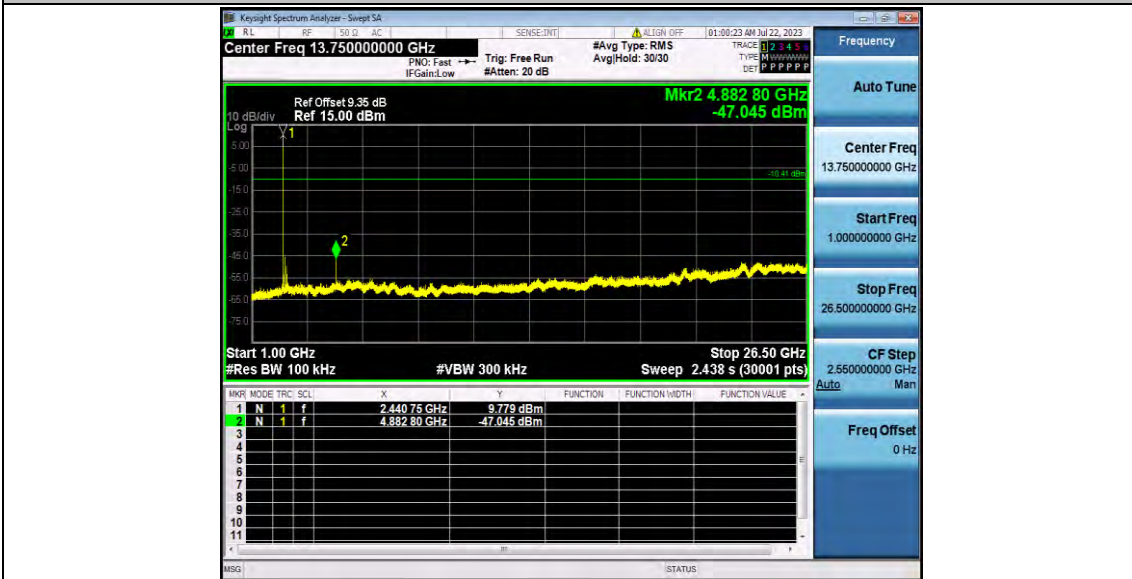
2DH1_Ant0_2402_1000~26500



2DH1_Ant0_2441_0~Reference



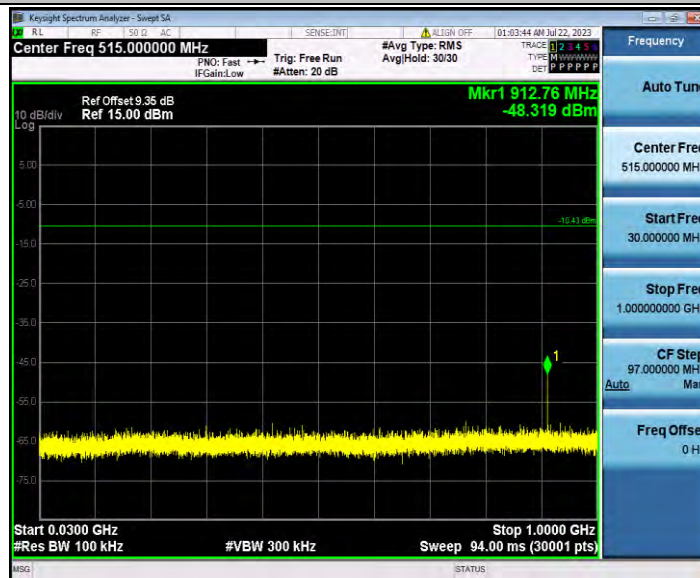
2DH1_Ant0_2441_30~1000



2DH1_Ant0_2441_1000~26500



2DH1_Ant0_2480_0~Reference



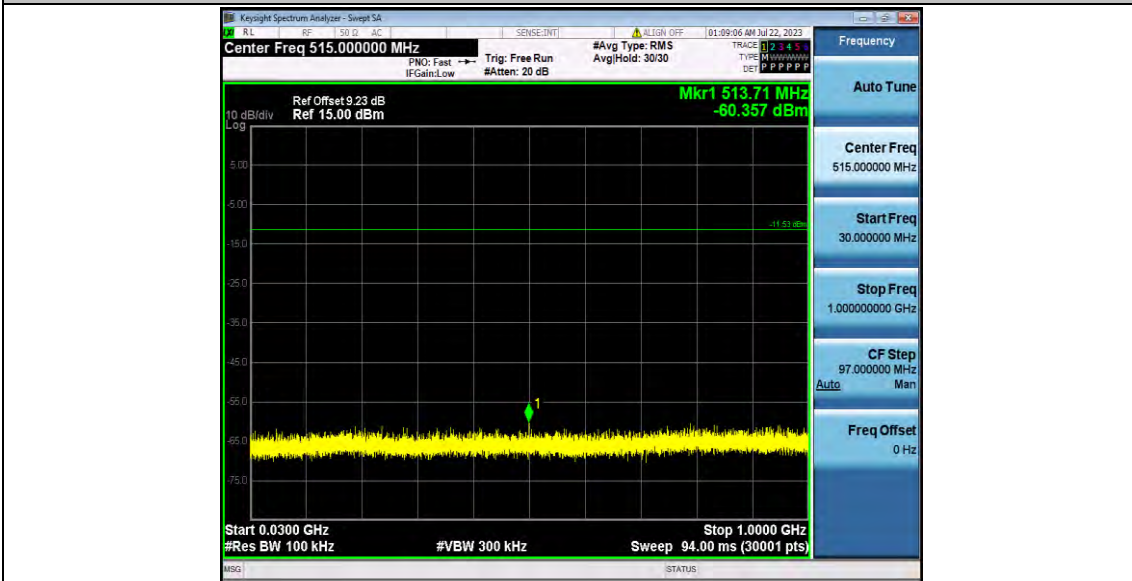
2DH1_Ant0_2480_30~1000



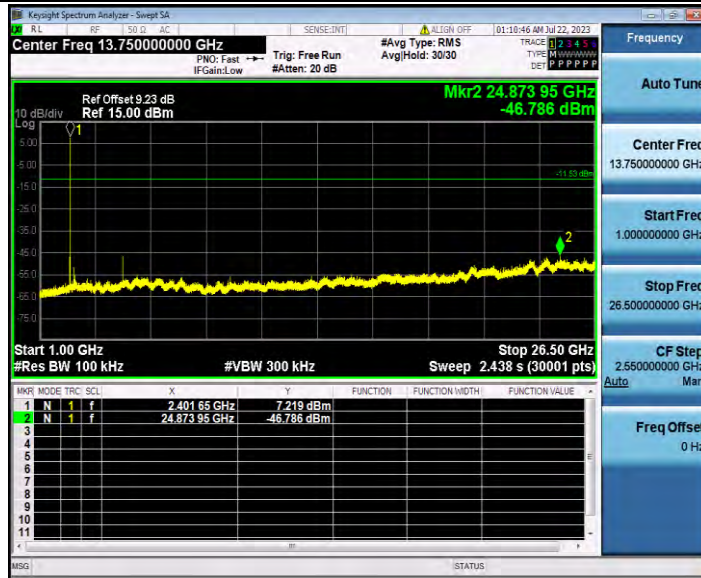
2DH1_Ant0_2480_1000~26500



3DH1_Ant0_2402_0~Reference



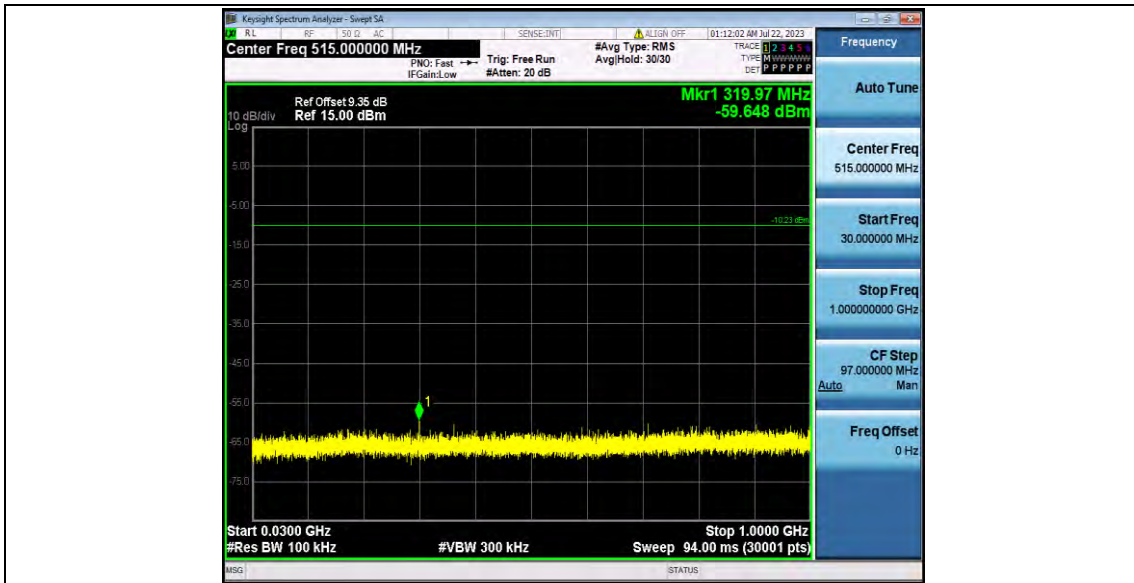
3DH1_Ant0_2402_30~1000



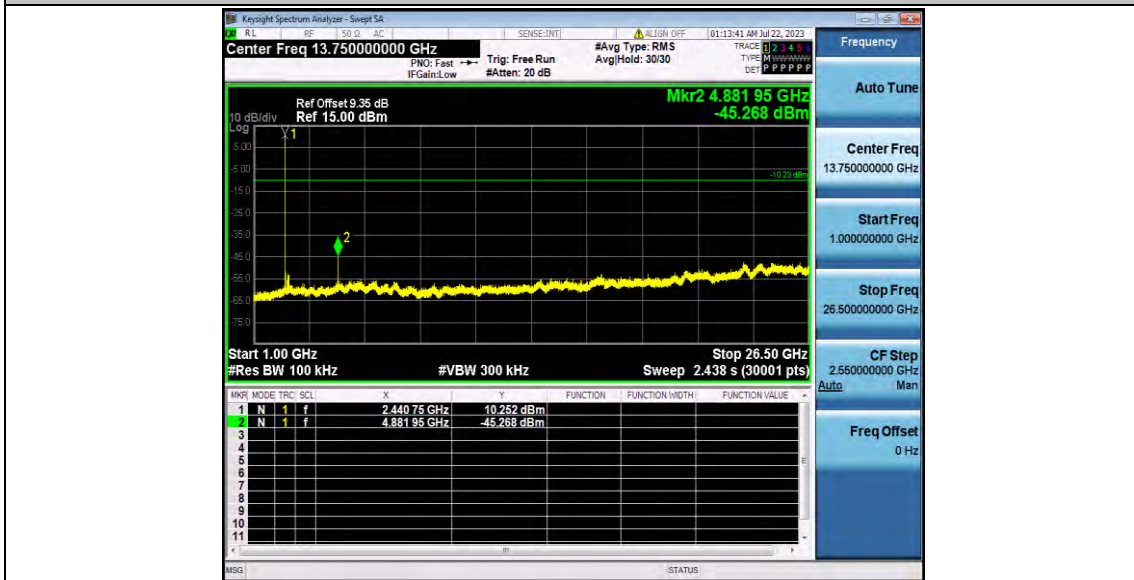
3DH1_Ant0_2402_1000~26500



3DH1_Ant0_2441_0~Reference



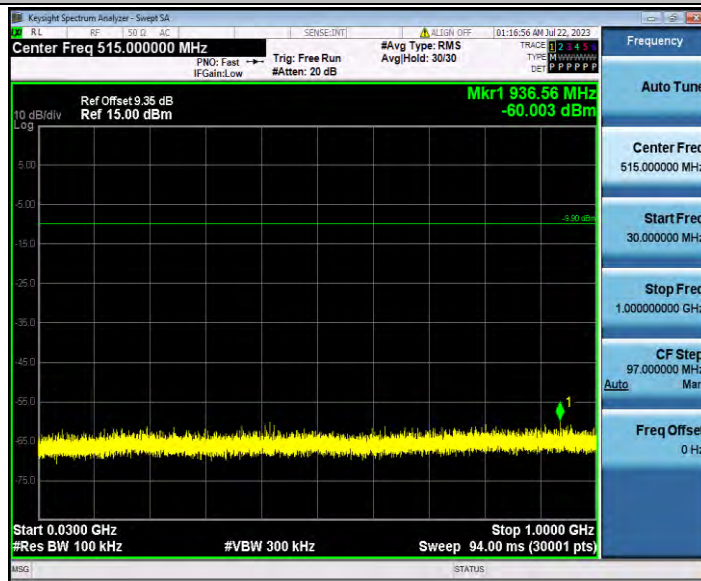
3DH1_Ant0_2441_30~100



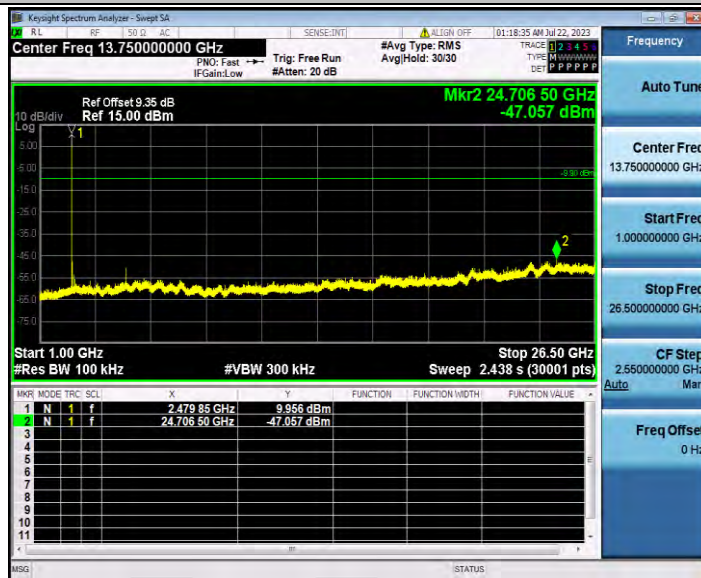
3DH1_Ant0_2441_1000~26500



3DH1_Ant0_2480_0~Reference



3DH1_Ant0_2480_30~1000



3DH1_Ant0_2480_1000~26500